Project: 807651 Emergency Preemption Receiver Installation

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 1992-93 Fund: 280 Gas Tax Street Improvement Project Manager: Jack Witthaus

Planned Completion Year: 2009-10 Sub-Fund: n.a. Project Coordinator: Dennis Ng

Funding Sources: Gas Tax

Project Description/Scope/Purpose

This project is the result of new technology whereby radio communications between emergency vehicles and traffic signals will preempt the signals for the safe passage of emergency vehicles. This project will provide for the installation of radio receivers in traffic signal control cabinets located at the City's traffic signalized intersections. Approximately two-thirds of traffic signals are currently equipped, including all major arterial intersections. The project will install 12 receivers per year and complete the installation of receivers at all signalized intersections within the City. Cost estimates are based on current market prices for receiver equipment. Units cost includes \$6,000 for materials, and \$2,300 for installation.

Project Evaluation & Analysis

This project will provide for an expansion of our emergency vehicle preemption system to include 12 additional traffic signals per year over a three year period of time. This system greatly improves the safety of roadway intersections and emergency vehicles during an emergency response and can reduce response time by 35-45% depending on traffic and length of run.

The City's current response time is four minutes and twenty-seven seconds for Fire Services emergency events and four minutes and four seconds for Emergency Medical Services (EMS). The National Fire Prevention Association standard for emergency response times is four minutes. This standard is voluntary, not mandatory, and delaying the project will not result in any sanction.

Fiscal Impact

Staff recommends this project be included in the FY 2007/2008 Unfunded Projects Listing. Funding for this project is proposed from the Gas Tax Fund.

roject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	674,756	49,902	624,854	C
2006-07	0	0	0	C
2007-08	0	0	0	C
2008-09	0	0	0	C
2009-10	102,000	0	0	C
2010-11	104,040	0	0	C
2011-12	106,121	0	0	C
2012-13	0	0	0	C
2013-14	0	0	0	C
2014-15	0	0	0	C
2015-16	0	0	0	C
2016-17	0	0	0	C
2017-18	0	0	0	C
2018-19	0	0	0	C
2019-20	0	0	0	C
2020-21	0	0	0	C
2021-22	0	0	0	C
2022-23	0	0	0	C
2023-24	0	0	0	C
2024-25	0	0	0	C
2025-26	0	0	0	C
2026-27	0	0	0	(
20 Year Total	312,161	0	0	(
Grand Total	986,917	49,902	624,854	C

Project: 815901 Lawrence Expressway and Wildwood Ave. Realignment

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 2001-02 Fund: 385 Capital Projects Project Manager: Hira Raina
Planned Completion Year: Grant Sub-Fund: 600 Gas Tax Funded Project Coordinator: Jack Witthaus

Funding Sources: Gas Tax Eligible, VTP 2030 (80% of cost)

Project Description/Scope/Purpose

This project provides funding for the realignment of Wildwood Avenue and the construction of a new signalized intersection at Wildwood Avenue and Lawrence Expressway. The project has been submitted for outside funding through the Valley Transportation Plan 2030 (VTP 2030), and is currently recommended for a funding allocation at some time over the 25 year lifetime of the Plan. It is estimated that VTP 2030 would fund 80% of the project cost and the City would provide a 20% local match. Staff recommends that this project be placed on the unfunded projects list. The estimated cost of the project is \$4.3 million in FY 2016/2017, based on conceptual engineering studies. Operating costs for signal electricity and maintenance would be incurred.

Project Evaluation & Analysis

Address traffic calming issues in the Lakewood neighborhood east of Lawrence Expressway. The project will improve roadway level of service at the Lawrence/Sandia intersection, and may reduce non-resident traffic intrusion in the area.

Fiscal Impact

Additional resources will be required for the Traffic Operations program to operate the new traffic signal subsequent to construction. It is expected that this project will be grant funded with the City share being 20%. This project is revenue dependent. Staff recommends this project be included in the FY 2007/2008 Unfunded Projects List until the revenue sources are secured. As funding opportunities present themselves, individual projects will be brought before the Council for consideration and budget appropriation.

roject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	1,364	0	1,364	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	4,217,974	0	0	0
2017-18	0	0	0	6,860
2018-19	0	0	0	7,065
2019-20	0	0	0	7,277
2020-21	0	0	0	7,496
2021-22	0	0	0	7,720
2022-23	0	0	0	7,952
2023-24	0	0	0	8,191
2024-25	0	0	0	8,436
2025-26	0	0	0	8,689
2026-27	0	0	0	8,950
20 Year Total	4,217,974	0	0	78,636
Grand Total	4,219,338	0	1,364	78,636

Project: 900087 Traffic Speed and Volume Monitoring Stations

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 2003-04 Fund: 385 Capital Projects Project Manager: Jack Witthaus
Planned Completion Year: 2015-16 Sub-Fund: 600 Gas Tax Funded Project Coordinator: Dennis Ng

Funding Sources: Gas Tax Eligible

Project Description/Scope/Purpose

This project is for the installation of permanent monitoring stations to collect more accurate data in a safer manner. The City currently collects annual traffic data to track and measure community conditions throughout the City. Analysis of this data is used to determine compliance with City policy. Currently, data monitoring equipment is placed and removed manually throughout the year. This method is unsafe and often times data has to be recollected due to equipment malfunction. With the installation of permanent monitoring stations, more accurate data on traffic volumes and speed can be collected in real time and safely. The task of annual data collection would become safer, since major arterial and collector streets would be monitored year round by permanent monitoring stations.

A total of 18 major arterial and collector streets locations have been selected City-wide to be monitored. These locations include: Homestead from Hollenbeck to SV-Saratoga; SV from ECR to Evelyn; Fair Oaks from Evelyn to Central; Wolfe from Homestead to Fremont; Reed from Wolfe to Evelyn; Java from Borregas to Crossman; Mathilda from Maude to 101; Mary from Central to Maude; Remington from SV-Saratoga to ECR; Wolfe from Evelyn to Kifer; SV-Saratoga from Remington to Fremont; Duane from Fair Oaks to Lawrence; Arques from Wolfe to Lawrence; Bernardo from ECR to Remington; Fremont from Mary to Hollenbeck; Mathilda from Moffett Park to Java. This project funds the installation of monitoring stations based on the following schedule: two locations per year for FY 2007/2008, FY 2009/2010, FY 2010/2011, FY 2012/2013, FY 2013/2014, FY 2014/2015, and 2015/2016; and one location per year for FY 2008/2009 and FY 2011/2012.

Project Evaluation & Analysis

Permanent monitoring stations allows more accurate data on traffic volumes and speed to be collected in real time and safely. Better traffic count data will provide better signal timing, economic development information, capital improvement planning, and other high value services. Traffic count data is also used as one of the criteria in setting and certifying speed limits in the City. Staff uses this data to calculate accident rates for roadway, enforcement and design.

Fiscal Impact

This project is currently unfunded. Staff recommends this project be included in the FY 2007/2008 Unfunded Projects Listing. Efficiencies will be gained through automation of counting, resulting in expansion of traffic counting resources without needing to add staff to place traditional hose counters.

oject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	49,470	0	0	2,071
2010-11	30,172	0	0	3,168
2011-12	61,550	0	0	5,386
2012-13	62,781	0	0	7,691
2013-14	22,082	0	0	8,965
2014-15	45,046	0	0	11,431
2015-16	45,947	0	0	16,323
2016-17	46,866	0	0	19,028
2017-18	48,272	0	0	22,048
2018-19	0	0	0	22,710
2019-20	0	0	0	23,391
2020-21	0	0	0	24,093
2021-22	0	0	0	24,816
2022-23	0	0	0	25,560
2023-24	0	0	0	26,327
2024-25	0	0	0	27,117
2025-26	0	0	0	27,930
2026-27	0	0	0	28,768
20 Year Total	412,186	0	0	326,823
Grand Total	412,186	0	0	326,823

Project: 900091 Fiberoptic Conduit/Cable Installation

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 2003-04 Fund: 385 Capital Projects Project Manager: Hira Raina
Planned Completion Year: Ongoing Sub-Fund: 600 Gas Tax Funded Project Coordinator: Dennis Ng

Funding Sources: Gas Tax Eligible, Prop. 42, Infrastructure Bonds

Project Description/Scope/Purpose

This project will provide for the installation of fiberoptic cables, conduits, pullboxes, and for connection to traffic signals. Installation of fiberoptic cables will allow for real-time monitoring, control, and operation of traffic signals from a central location. Installation of cable will allow the City to implement Intelligent Transportation System (ITS) devices, providing for quicker response to changing traffic conditions, accidents, and incidents; for sharing of information with other cities and jurisdictions; and for coordination of traffic signals on multi-jurisdictional corridors. Devices that would benefit from installation of fiberoptics would include signal interconnect systems, adaptive traffic signal network systems, automated traffic count stations, SMART Corridor integration with neighboring jurisdictions and the County, Closed Circuit Television Traffic Management system, Downtown Parking Management System, and ITS signal controller implementation.

The installation schedule is as follows: FY 2009/2010 and FY 2010/2011 - install conduits and pullboxes in half of Sunnyvale; FY 2011/2012 - install the fiberoptic cable in those conduits; FY 2012/2013 and FY 2013/2014 - install conduits and pullboxes in the other half of Sunnyvale; FY 2014/15 - install fiberoptic cable in those conduits. The project costs are higher in the last three years of the project schedule due to the increased distance/length of runs as we will be installing conduits and cables to the furthest traffic signals in the City. This project will potentially connect all City facilities and traffic signals on major arterials.

Project Evaluation & Analysis

This project will allow Sunnyvale to better coordinate traffic signals with incidents and changing real-time traffic, to work with other agencies for real-time adjustment of traffic signals on a region-wide basis (Silicon Valley Smart Corridor), and to incorporate all City facilities onto one communications network.

Fiscal Impact

Upon full installation of the cables throughout the City, cost savings is expected to be realized in the City's Information Technology Department operating budget. This is because the City would not need to lease the lines from outside providers at these sites. This project is currently unfunded. Staff recommends this project be included in the FY 2007/2008 Unfunded Projects Listing until revenue sources are secured.

oject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	C
2006-07	0	0	0	(
2007-08	0	0	0	C
2008-09	0	0	0	C
2009-10	326,400	0	0	(
2010-11	228,888	0	0	-6,336
2011-12	350,199	0	0	-12,926
2012-13	346,378	0	0	-21,973
2013-14	242,898	0	0	-29,137
2014-15	557,450	0	0	-36,578
2015-16	0	0	0	-44,305
2016-17	0	0	0	-45,191
2017-18	0	0	0	-46,547
2018-19	0	0	0	-47,943
2019-20	0	0	0	-49,381
2020-21	0	0	0	-50,863
2021-22	0	0	0	-52,389
2022-23	0	0	0	-53,960
2023-24	0	0	0	-55,579
2024-25	0	0	0	-57,246
2025-26	0	0	0	-58,964
2026-27	0	0	0	-60,733
20 Year Total	2,052,213	0	0	-730,051
Grand Total	2,052,213	0	0	-730,051

Project: 900096 Countdown Pedestrian Signal Indication Installation

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 2003-04 Fund: 385 Capital Projects Project Manager: Jack Witthaus
Planned Completion Year: 2015-16 Sub-Fund: 600 Gas Tax Funded Project Coordinator: Dennis Ng

Funding Sources: Gas Tax Eligible

Project Description/Scope/Purpose

This project funds the installation of countdown pedestrian signal indicators to improve safety and reduce confusion to pedestrians. Staff has received numerous requests/complaints regarding pedestrian crossing safety and timing of signalized intersections for pedestrians. The majority of these calls can be attributed to the lack of comprehension of the meaning of the pedestrian indications. Pedestrian countdown devices that give a visual indication of the time remaining until a signal changes have been successfully implemented in Sunnyvale and in other cities (San Francisco, Monterey, and San Jose). This project would retrofit five signalized intersections per year at a cost of \$4,000 per intersection over nine years. After the completion of this first project, staff would review the need to expand installations beyond the original 45 intersections.

Project Evaluation & Analysis

Based on favorable comments from the Public regarding the installations in Sunnyvale, staff feels this project will improve pedestrian safety by better conveying the crossing time allocated for that movement at signalized intersections and also reduce confusion over the meaning of each pedestrian indication. These devices are considered to be a standard and will be used to replace existing equipment as it fails, if feasible. Staff estimates that providing the devices through infrastructure replacement will take 50+ years to retrofit the City.

Fiscal Impact

This project is currently unfunded. Staff recommends this project be included in the FY 2007/2008 Unfunded Projects Listing until revenue sources are secured. No additional operating costs are required as they are already included in the Transportation Operations program budget.

roject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	20,000	0	0	0
2009-10	20,400	0	0	0
2010-11	20,808	0	0	0
2011-12	21,224	0	0	0
2012-13	21,649	0	0	0
2013-14	22,082	0	0	0
2014-15	22,523	0	0	0
2015-16	22,974	0	0	0
2016-17	23,433	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	195,093	0	0	0
Grand Total	195,093	0	0	0

Project: 900103 In-Pavement Crosswalk Warning Lights

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 2003-04 Fund: 385 Capital Projects Project Manager: Jack Witthaus
Planned Completion Year: 2012-13 Sub-Fund: 600 Gas Tax Funded Project Coordinator: Dennis Ng

Funding Sources: Gas Tax Eligible

Project Description/Scope/Purpose

This project will install in-pavement crosswalk warning lights in crosswalks at uncontrolled intersections near schools and senior facilities. Staff has received numerous requests from the Public to increase safety and motorist awareness of pedestrians in crosswalks. Staff finished evaluating the effectiveness of the new in-pavement crosswalk light device and has found that they improve pedestrian safety and alert motorists of pedestrians in the crosswalks under certain conditions, such as, a roadway user approaching a condition on or adjacent to the roadway that might not be readily apparent and may require the road user to slow down and/or come to a stop. Staff would like to implement two devices per year starting in FY 2007/2008 at critical uncontrolled high pedestrian intersections around the City. Staff proposes to install a total of 12 units on streets meeting criteria for pedestrian and vehicle volume and street configuration. Costs are based on a unit cost of \$55,000 for equipment and installation. LED systems will be used which operate on solar power and do not require electric connectors.

Project Evaluation & Analysis

The in-pavement crosswalk warning lights will improve pedestrian safety when using crosswalks in intersections which do not have signals or stop signs.

Fiscal Impact

This project is currently unfunded. Staff recommends this project be included in the FY 2007/2008 Unfunded Projects Listing until revenue sources are secured. Future infrastructure replacement costs for crosswalk components for each set of two lighted crosswalks would be needed 12 years from the construction completion year.

roject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	110,000	0	0	0
2008-09	110,000	0	0	0
2009-10	112,200	0	0	0
2010-11	114,444	0	0	0
2011-12	116,733	0	0	0
2012-13	119,067	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	20,792
2020-21	0	0	0	21,416
2021-22	0	0	0	22,058
2022-23	0	0	0	22,720
2023-24	0	0	0	23,402
2024-25	0	0	0	24,104
2025-26	0	0	0	24,827
2026-27	0	0	0	25,572
20 Year Total	682,444	0	0	184,891
Grand Total	682,444	0	0	184,891

Project: 900141 Future Traffic Calming Projects

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 2003-04 Fund: 385 Capital Projects Project Manager: Jack Witthaus
Planned Completion Year: Ongoing Sub-Fund: 600 Gas Tax Funded Project Coordinator: Jack Witthaus

Funding Sources: Gas Tax Fund Eligible

Project Description/Scope/Purpose

This project provides funding for future traffic calming projects. Traffic calming devices slow traffic and deter non-neighborhood traffic in residential areas of the City. This project provides for the construction of neighborhood traffic calming devices as a result of studies and neighborhood consensus building. The proposed project budget will allow for installation of approximately one comprehensive traffic calming project per year. The locations have not been determined, and the project budget is based on anticipated and historical demand. The operating cost budget is required to pay for landscaping and maintenance costs, if necessary, related to the devices. These funds will be expended only at the conclusion of neighborhood-specific traffic calming studies per the Council-adopted policy. These studies include a technical determination of need, a resident consensus-building process, and Council endorsement of study recommendations for construction of traffic calming devices.

Project Evaluation & Analysis

This project anticipates traffic calming requests and provides funding to meet resident desires for traffic calming.

Fiscal Impact

This project is currently unfunded. Staff recommends this project be included in the FY 2007/2008 Unfunded Projects Listing until revenue sources are secured. Operating costs are estimated at \$3,000 annually per project.

roject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Cost
Prior Actual	0	0	0	C
2006-07	0	0	0	C
2007-08	0	0	0	C
2008-09	0	0	0	C
2009-10	102,000	0	0	3,106
2010-11	104,040	0	0	6,336
2011-12	106,121	0	0	9,694
2012-13	108,243	0	0	13,184
2013-14	110,408	0	0	16,810
2014-15	112,616	0	0	20,575
2015-16	114,869	0	0	24,484
2016-17	117,166	0	0	28,542
2017-18	120,681	0	0	33,073
2018-19	124,301	0	0	37,850
2019-20	128,030	0	0	42,884
2020-21	131,871	0	0	48,186
2021-22	135,827	0	0	53,767
2022-23	139,902	0	0	59,640
2023-24	144,099	0	0	65,817
2024-25	148,422	0	0	72,311
2025-26	152,875	0	0	79,136
2026-27	157,461	0	0	86,304
20 Year Total	2,258,932	0	0	701,699
Grand Total	2,258,932	0	0	701,699

Project: 900151 Bicycle Capital Improvement Program

Category:CapitalType:Traffic & TransportationDepartment:Public WorksOrigination Year:2005-06Fund:385Capital ProjectsProject Manager:Jack WitthausPlanned Completion Year:OngoingSub-Fund:600Gas Tax FundedProject Coordinator:Dieckmann Cogill

Funding Sources: Future Grant Funding

Project Description/Scope/Purpose

This project provides funding for the Bicycle Capital Improvement Program. In order to meet the City's goal of encouraging the use of alternative modes of transportation to the automobile, the City developed the Bicycle Capital Improvement Program. The Program, as approved by Council on December 19, 2000 (RTC 00-422), states that the program is intended as a guide, not an action plan. It is expected the project priorities will be evaluated as part of the City's capital projects budget process and study issues process. The bike lane projects listed in the plan are as follows: Wildwood: Bridgewood-City Limit \$106,210; Mathilda: US 101-Maude \$127,300; Mary: Fremont-El Camino Real \$195,700; Evelyn: Sunnyvale-Reed \$233,700; Borregas: \$265,240; Duane: Fair Oaks-Lawrence \$184,300; Mary: El Camino Real-Evelyn \$92,340; Hollenbeck: Grand Coulee-Dansforth \$232,560; Pastoria: El Camino Real-Evelyn \$250,990; Bernardo: El Camino Real-Evelyn \$27,800; Hendy: Sunnyvale-Fair Oaks \$16,000; Tasman: Fair Oaks-City Limit \$37,000; Bernardo: Homestead-Fremont \$159,220; Belleville: Fremont-Homestead \$153,900; Remington: Mary-Sunnyvale \$212,230; California: Mary-Mathilda \$78,470; Olive: Mathilda-Fair Oaks \$22,700; Lakewood/Sandia Bikeway \$22,700; Fair Oaks: Evelyn-Old San Francisco \$12,900; Maude: Mathilda-Wolfe \$25,600; and Northwest Bikeway -Del Ray Pastoria to Mathilda \$45,700. The total cost of all improvements is \$2,502,560. If outside funding is received, the City could be required to provide matching funds of up to 20% or \$500,512.

Project Evaluation & Analysis

The project will improve the service level for bicyclists living and working in Sunnyvale.

Fiscal Impact

oject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	122,002	0	0	0
2016-17	149,152	0	0	0
2017-18	236,173	0	0	0
2018-19	329,697	0	0	0
2019-20	235,960	0	0	0
2020-21	121,770	0	0	0
2021-22	315,880	0	0	0
2022-23	351,141	0	0	0
2023-24	40,060	0	0	0
2024-25	1,514,086	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	C
20 Year Total	3,415,921	0	0	C
Grand Total	3,415,921	0	0	0

Project: 900152 Moffett Park Bicycle and Pedestrian Trails

Category:CapitalType:Traffic & TransportationDepartment:Public WorksOrigination Year:2005-06Fund:385Capital ProjectsProject Manager:Jack WitthausPlanned Completion Year:2017-18Sub-Fund:100General Fund AssetsProject Coordinator:Dieckmann Cogill

Funding Sources: VTP 2030

Project Description/Scope/Purpose

This project will construct bicycle and pedestrian trails along two Santa Clara Valley Water District (SCVWD) drainage canals in Moffett Park. SCVWD Moffett Park Trails is a component of the implementation of the Moffett Park Specific Plan. This project will improve accessibility and recreation opportunities in Moffett Park.

Project Evaluation & Analysis

The project will increase the service level for bicyclists and pedestrians who live and/or work in Sunnyvale. It will be used both for recreation and for transportation.

Fiscal Impact

oject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	5,858,297	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	C
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	C
20 Year Total	5,858,297	0	0	C
Grand Total	5,858,297	0	0	0

Project: 900215 VTP 2030 Highway, Expwy and Local Streets and Roads Projects

Category:	Capital	Type:	Traf	fic & Transportation	Department:	Public Works
Origination Year:	2006-07	Fund:	385	Capital Projects	Project Manager:	Jack Witthaus
Planned Completion Year :	2025-26	Sub-Fund:	600	Gas Tax Funded	Project Coordinator:	Jack Witthaus

Funding Sources: Future Federal and State Grants, Gas Tax Eligible

Project Description/Scope/Purpose

This project provides funding for the VTP 2030 Local Streets and County Roads Project. The Valley Transportation Authority (VTA) and the City recently completed long range plans for Route 237 and Route 85 highway and interchange facilities. These projects are programmed into the Valley Transportation Plan (VTP) 2030 and are envisioned to be completed within the next 25 years. These projects will maintain traffic flow on two major regional facilities and their City access ways.

These projects include:(1) 237/101/Mathilda Improvements - \$13 million; (2) 237 Highway Occupancy Vehicle (HOV) lanes, Highway 85 to Mathilda - \$36 million; (3) Westbound 237/Northbound 101 connector ramp improvement - \$8 million; (4) Southbound 101 to Eastbound 237 connector ramp improvement - \$3 million; (5) Southbound 101 auxiliary lane, Great America to Lawrence - \$2 million; (6) Lawrence Expressway/237 auxiliary lane - \$3 million; and (7) Eastbound 237 Auxiliary lane, Mathilda to Fair Oaks - \$5 million.

Project Evaluation & Analysis

This project identifies funding required for projects within the Sunnyvale City limits that are listed in the fiscally constrained portion of the Valley Transportation Plan 2030 Highway and Local Streets and County Roads Programs. These projects are priorities of the region's long range transportation plan and are envisioned to be completed within the next 25 years. These projects will maintain traffic flow on major regional facilities, City access ways, and City streets; and improve traffic safety on the expressway system. Locations identified in this project are locations without specific funding allocations made for improvements at this time.

Fiscal Impact

oject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	14,932,914	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	46,090,938	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	31,168,684	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	92,192,536	0	0	0
Grand Total	92,192,536	0	0	0

Project: 900222 Countywide Integration of Traffic Management Center

Category:CapitalType:Traffic & TransportationDepartment:Public WorksOrigination Year:2005-06Fund:385Capital ProjectsProject Manager:Jack WitthausPlanned Completion Year:2014-15Sub-Fund:600Gas Tax FundedProject Coordinator:Dennis Ng

Funding Sources: Future Grant Funding

Project Description/Scope/Purpose

This project provides funding for the Countywide Integration of the Traffic Management Center. The Traffic Management Center located in the Traffic and Transportation Division monitors and adjusts traffic signal operation from City Hall. This project would implement a physical connection to countywide data and video sharing networks to improve the ability to coordinate traffic signal operations between neighboring traffic management centers of various Cities and County. The project has been identified and listed in VTA's VTP2030 plan and is subject to future funding. This project will only proceed if grant funding is obtained.

Project Evaluation & Analysis

Implementing a more centralized, modernized traffic signal control system may, over time and assuming system-wide changes and upgrades, result in reconfiguration of traffic signal operations and service levels.

Fiscal Impact

roject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	247,756	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	247,756	0	0	0
Grand Total	247,756	0	0	0

Project: 900223 Closed Circuit TV Cameras for Traffic Management

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 2005-06 Fund: 385 Capital Projects Project Manager: Jack Witthaus
Planned Completion Year: 2019-20 Sub-Fund: 600 Gas Tax Funded Project Coordinator: Dennis Ng

Funding Sources: Future Grant Funded

Project Description/Scope/Purpose

This project provides funding for Closed Circuit Television Cameras for traffic management. This project will deploy CCTV cameras for traffic monitoring and incident management on major arterials such as Mathilda, Sunnyvale-Saratoga, Fair Oaks, and Wolfe. This will allow staff to quickly respond to traffic signal trouble calls, react/adjust traffic signal timing impacted by incidents, accidents, and construction, and monitor traffic conditions on various arterials from one location and provide quick and efficient changes. This project has been identified and listed in VTA's VTP 2030 plan and is subject to future funding.

At this time, staff anticipates the impact to operating costs to be nominal and will be absorbed by the Traffic Operations program.

Project Evaluation & Analysis

Implementing a more centralized, modernized traffic signal control system may, over time and assuming system-wide changes and upgrades, result in a reconfiguration of traffic signal operations and service levels

Fiscal Impact

oject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	1,063,932	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	C
20 Year Total	1,063,932	0	0	C
Grand Total	1,063,932	0	0	0

Project: 900224 Expansion of Adaptive Traffic Signal Control System

Category:CapitalType:Traffic & TransportationDepartment:Public WorksOrigination Year:2005-06Fund:385Capital ProjectsProject Manager:Jack WitthausPlanned Completion Year:2017-18Sub-Fund:600Gas Tax FundedProject Coordinator:Dennis Ng

Funding Sources: Future Grant Funding

Project Description/Scope/Purpose

This project will expand the City's existing Adaptive Traffic Signal Control System to all major arterials, such as, Wolfe, Fair Oaks, Evelyn, Homestead, and Mary. Adaptive traffic signal control systems constantly adjust for changing traffic conditions while maintaining coordination along corridors and can adjust for incidents and highly variable traffic flows. With the implementation of systems on other City/County corridors, evaluations show that the system provides great benefits for the general public in reducing delays and improving travel times. This project has been identified and listed in VTA's VTP 2030 plan and is subject to future funding.

Project Evaluation & Analysis

Adaptive traffic signal control has been determined to be the most effective means of squeezing efficiency from coordinated traffic signal systems. Other alternatives do not allocate signal time as efficiently. This project represents a signal system enhancement, and therefore will not cause significant impacts if deferred. However, as roadways become more crowded, adaptive signal control may be a critical tool for maintaining traffic flow to support commerce and the environment.

Fiscal Impact

Project Financial Summary				
	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	3,318,725	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	3,318,725	0	0	0
Grand Total	3,318,725	0	0	0

Project: 900227 ITS Traffic Signal Controller Upgrade

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 2005-06 Fund: 385 Capital Projects Project Manager: Jack Witthaus
Planned Completion Year: 2014-15 Sub-Fund: 600 Gas Tax Funded Project Coordinator: Dennis Ng

Funding Sources: Future Grant Funds

Project Description/Scope/Purpose

This project provides funding for the implementation of the new Intelligent Transportation System (ITS) Traffic Signal Controllers at various intersections around the City. These state of the art traffic signal controllers will be capable of adaptive signal control, transit priority, communications with City Hall, and variable traffic signal timing plans. This project has been identified in VTA's VTP2030 plan and is subject to future grant funding. These central systems would be implemented at locations off the major arterial corridors and not candidates to be part of larger adaptive systems. These costs would be over and above controller infrastructure replacement costs.

Project Evaluation & Analysis

This project would enhance the City's traffic signal control capabilities, and consequently improve the efficiency of traffic flow. New ITS traffic signal controllers will integrate with other ITS devices such as camera, signs, monitoring equipment, homeland security devices, traffic signals seamlessly and allow communications across manufacturer platforms. Will allow jurisdictions and government agencies to share and implement devices.

Fiscal Impact

Project Financial Summary Operatin				
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	563,081	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	563,081	0	0	0
Grand Total	563,081	0	0	0

Project: 900275 Caribbean Bridge Replacement

Category: Infrastructure Type: Traffic & Transportation

Department: Origination Year: 2005-06 Fund: 610 Infrastructure Renov & Replace Project Manager: Hira Raina Planned Completion Year: 2016-17 Project Coordinator: Jim Craig Sub-Fund: 100 General Fund Assets

Funding Sources: **Future Grant Funding**

Project Description/Scope/Purpose

This project will fund the replacement of the Caribbean Bridge in order to eliminate frequent flooding due to the low elevation. The bridge replacement work can only happen after Santa Clara Valley Water District (SCVWD) improves the Bay front levees, Sunnyvale East Channel and Sunnyvale West Channel. At present, it seems that these improvements are scheduled to start in the year 2016. Anticipating that work will go as scheduled, the design of the Caribbean bridges replacement will start in FY 2013/2014 and construction is expected to start either simultaneously or shortly after the levee improvements are completed.

Project Evaluation & Analysis

Replacement of the bridge will eliminate frequent flooding due to the low elevation of the bridges.

Fiscal Impact

This project is revenue dependent. Staff recommends this project be included in the FY 2007/2008 Unfunded Projects List until the revenue sources are secured. As funding opportunities present themselves, individual projects will be brought before the council for consideration and budget appropriation.

oject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	110,408	0	0	0
2014-15	450,465	0	0	0
2015-16	1,723,029	0	0	0
2016-17	1,757,489	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	4,041,391	0	0	0
Grand Total	4,041,391	0	0	0

Public Works

Project: 900454 Stevens Creek Trail Connector

Category:CapitalType:Traffic & TransportationDepartment:Public WorksOrigination Year:2007-08Fund:385Capital ProjectsProject Manager:Jack WitthausPlanned Completion Year:2017-18Sub-Fund:100General Fund AssetsProject Coordinator:Dieckmann Cogill

Funding Sources: Park Dedication Eligible

Project Description/Scope/Purpose

The City of Mountain View has planned an alignment for a Stevens Creek Trail extension which will pass close to the Sunnyvale border. Mountain View is still years away from full funding of the last segment of the trail, from Sleeper Drive to Mountain View High School. This last segment of trail (known as Reach 4, Segment 2) is planned to parallel the creek, just west of SR 85 going south, then continue across SR 85 near the intersection of Heatherstone Way and Dale Avenue in Mountain View, then parallel SR 85 south until a point near the end of Remington Avenue where it would cross SR 85 again and terminate at Mountain View High School and Bryant Way. The City of Cupertino is currently planning to develop a trail from Stevens Creek County Park to St. Joseph's Avenue near Los Altos. Now that Cupertino's plans are known, the City of Los Altos is planning to conduct a feasibility study on the Stevens Creek Trail issue. It is expected that the results of the study will propose a connection to the trail from St. Joseph's Avenue to a point within reach of the Mountain View High School. Because the Mountain View trail is planned to be built adjacent to the City of Sunnyvale, this project will provide access to the Mountain View Reach 4 trail when completed. The feasibility, timing and costs of creating access points from surface streets to the proposed Stevens Creek Trail in Mountain View from the City of Sunnyvale will be considered. Possible access points would be identified and would include Remington Drive and Mockingbird Lane alternatives in addition to any other possibilities. Options for type of access, feasibility, costs and timing would be developed. Upon completion of project planning, development, and environmental analysis, a trail connection would be constructed.

Project Evaluation & Analysis

The City could decline to pursue a direct connection to this major regional recreational facility, but this would impair access for Sunnyvale residents. Timing of this project will be dependent on funding and construction of Reach 4, which is not determined at this time but anticipated to be at least 10 years in the future. The City would not need to construct a connector at the time of completion of Reach 4, but postponement would delay realizing the recreation benefits of access to this major regional recreational facility.

Fiscal Impact

This project is proposed to be dependent on realization of outside revenues. Costs are based on the City's recent experience with construction of the Calabazas Creek Trail. The Capital expenditures range covers the cost of construction of a bridge structure crossing the creek and connecting to the Reach 4 alignment. The operating expenditures will cover the costs to maintain the structure or access point; this includes graffiti removal, enforcement, and repairs. Operating costs are based on recent experience with the Calabazas Creek Trail.

Project Financial Summary Operating				
_	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	292,915	0	0	0
2017-18	1,086,128	0	0	0
2018-19	0	0	0	4,100
2019-20	0	0	0	4,223
2020-21	0	0	0	4,350
2021-22	0	0	0	4,481
2022-23	0	0	0	4,615
2023-24	0	0	0	4,753
2024-25	0	0	0	4,896
2025-26	0	0	0	5,043
2026-27	0	0	0	5,194
20 Year Total	1,379,043	0	0	41,655
Grand Total	1,379,043	0	0	41,655

Stevens Creek Trail Connector

Project: 900468 Sunnyvale East Channel Trail (JWC Greenbelt to 237)

Category: Capital Type: Traffic & Transportation Department: Public Works
Origination Year: 2007-08 Fund: 385 Capital Projects Project Manager: Hira Raina
Planned Completion Year: 2009-10 Sub-Fund: 600 Gas Tax Funded Project Coordinator: Jack Witthaus

Funding Sources: Gas Tax Eligible

Project Description/Scope/Purpose

This project entails the construction of a trail on the Sunnyvale East Channel, from the John Christian Greenbelt (JWCG) to Highway 237. The project would also include access to the trail, and Tasman Drive from the mobile home park located to the north of Tasman Drive. This project was identified as part of the Tasman/Fair Oaks Pedestrian and Bicycle Circulation Plan in order to improve access to schools, transit and open space in the neighborhood.

Project Evaluation & Analysis

The project will increase the service level by improving livability for the residents in the neighborhood. It also encourages increased pedestrian, bicycle and transit use through streetscape improvements, land use planning and architectural design.

Fiscal Impact

This project is currently unfunded. Staff recommends this project be included in the FY 2007/2008 Unfunded Projects Listing until revenue sources are secured.

roject Financ	ial Summary			Operating
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	1,326,000	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	1,326,000	0	0	0
Grand Total	1,326,000	0	0	0

Project: 900469 El Camino Real Gateway Program

Category: Capital Type: Traffic & Transportation Department: Community Development

Origination Year: 2007-08 Fund: 385 Capital Projects Project Manager: Hira Raina Planned Completion Year: 2009-10 Sub-Fund: 600 Gas Tax Funded Project Coordinator: Trudi Ryan

Funding Sources: Gas Tax Eligible

Project Description/Scope/Purpose

This project implements gateway improvements identified in the El Camino Precise Plan, adopted by Council on January 23, 2007 (RTC 07-003). Gateways locations are identified near the east and west City limits on El Camino Real. The goal of the El Camino Real Gateway Program is to enhance the City's "front doors" by not only constructing improvements in the areas seen by most people, but by doing so in a way that provides a unique identify and sense of place for each location and the edges of the City. The program will establish design standards for each location. The overall design concept could be to provide towers, fountains, beacons, gateposts, pylons, or signs that become focal points to the City. The Program will require coordination and agreement with Caltrans.

Project Evaluation & Analysis

Enhancements to gateways would promote Sunnyvale as a destination for business, which would enhance the local economy.

Fiscal Impact

This project is currently unfunded. Staff recommends this project be included in the FY 2007/2008 Unfunded Projects Listing until revenue sources are secured.

Project Financial Summary Operatin				
	Project Costs	Revenues	Transfers In	Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	3,060,000	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	3,060,000	0	0	0
Grand Total	3,060,000	0	0	0

El Camino Real Gateway Program